



12 AR
Docket No.: LMRX- P079/P0602

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/539,313
Applicants : Huang et al.
Filed : 03/30/2000
TC/A.U. : 2143
Confirmation No. : 7930
Examiner: : ENGLAND, DAVID E.
Title : PLUG AND PLAY SENSOR INTEGRATION FOR
A PROCESS MODULE

APPEAL BRIEF

MS APPEAL BRIEF-PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir or Madam:

This brief is presented under 37 CFR § 41.37 in support of an appeal from a Final Office Action of 11/20/2006 regarding the above-identified application.

Notice of the Appeal was filed under 37 CFR § 41.31 on 02/15/ 2007. This brief is accompanied by the fee set forth in 37 CFR § 41.20(b)(2), as described in the accompanying TRANSMITTAL OF APPEAL BRIEF.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is the Lam Research Corporation, a corporation established under the laws of the State of California and having a principle place of business in Fremont, California.

II. RELATED APPEALS AND INTERFERENCES

Applicants are unaware of any related appeal or interference.

III. STATUS OF CLAIMS

- A. Total Claims: 1-18.
- B. Current Status of Claims:
 - 1. Claim canceled: 18
 - 2. Claims withdrawn: 10-15
 - 3. Claims pending: 1-9, 16, and 17
 - 4. Claims allowed: none
 - 5. Claims rejected: 1-9, 16, and 17
- C. Claims on Appeal: 1-9, 16, and 17

IV. STATUS OF AMENDMENTS

An Amendment with all compliances ("Amendment H") in response to a Non-Final Office Action was submitted on 08/23/2006. A Final Office Action was mailed on 11/20/2006. A Notice of Appeal was submitted on 02/15/2007 giving notice to appeal the rejections in the Final Office Action, and this Appeal Brief is in

furtherance of the Notice of Appeal. The claims on appeals are those in the Amendment H.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A. Independent claim 1

A computer implemented method for communicating between a computing system of a process module, wherein the process module has a process chamber, and a first sensor (P. 2, L. 26-28; P. 4, L. 1-7; FIG. 1), the computer implemented method comprising the steps of: initializing the computing system of the process module (P. 7, L. 9-10; FIG. 4); initializing the first sensor, which is able to measure a first parameter in the process chamber (P. 7, L. 9-10; P. 4, L. 23-28; FIG. 4); transmitting a connect message from the first sensor to the computing system of the process module (P. 7, L. 16-20; FIG. 4); transmitting a command to get reportable specification from the computing system of the process module to the first sensor, the computing system having no prior knowledge of a data type specification transmitted by the first sensor upon the transmitting the command to get the reportable specification (P. 8, L. 14-15, L. 21-22); automatically transmitting, upon receiving the command to get the reportable specification, a reportable specification message from the first sensor to the computing system of the process module, the reportable specification message being configured to inform the computing system of the processing module at least the data type specification transmitted by the first sensor (P. 8, L. 15-19); and transmitting a process related command related to the execution of an action in the process chamber from the computing system of the

process module to the first sensor (P. 9, L. 6-29); and thereafter receiving, using the computing system of the processing module and the reportable specification message received from the first sensor, sensor data from the first sensor (P. 9, L. 30-31; P. 10, L. 1-15).

Claims 2-9, 16, and 17, which are argued together with independent claim 1, depend directly or indirectly from independent claim 1 and incorporate all of the elements of independent claim 1, as described above.

B. Dependent claims

Claim 2 is a dependent claim to independent claim 1 and recites that the computer implemented method of claim 1 further comprises the steps of: spawning within the computing system of the process module a connection monitor task (P. 7, L. 12-14; FIG. 1); spawning from the connection monitor task within the computing system of the process module a first sensor messaging task (P. 7, L. 20-22; FIG. 1); transmitting an acknowledgement of the command to get reportable specification from the first sensor to the computing system of the process module (P. 8, L. 15-17; FIG. 4); and transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the first sensor (P. 8, L. 19-21; FIG. 4).

Claim 3 is a dependent claim to dependent claim 2 and recites that the computer implemented method of claim 2 further comprises the steps of: transmitting command to get an alarm table command from the first sensor to the computing system of the process module (P. 7, L. 25-26; FIG. 4); transmitting an

acknowledgement of the command to get the alarm table from the computing system of the process module to the first sensor (P. 7, L. 26-28; FIG. 4); transmitting an alarm table from the computing system of the process module to the first sensor, wherein the alarm table designates the number of alarms, alarm identification numbers, and descriptions of the alarms (P. 7, L. 29-31; P. 8, L. 1; FIG. 4); and transmitting an acknowledgement of the alarm table from the first sensor to the computing system of the process module (P. 8, L. 2-3; FIG. 4).

Claim 4 is a dependent claim to dependent claim 3 and recites that the computer implemented method of claim 3 further comprises the steps of: transmitting command to get time and initialization data from the first sensor to the computing system of the process module (P. 8, L. 4-5; FIG. 4); transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the first sensor (P. 8, L. 5-8; FIG. 4); transmitting time and initialization data from the computing system of the process module to the first sensor (P. 8, L. 8-10; FIG. 4); and transmitting an acknowledgement of the time and initialization data from the first sensor to the computing system of the process module (P. 8, L. 11-13; FIG. 4).

Claim 5 is a dependent claim to dependent claim 4 and recites that the computer implemented method of claim 4 further comprises the steps of: transmitting a process related command related to the execution of an action in the process chamber from the computing system of the process module to the first sensor (P. 9, L. 6-7; FIG. 4); executing the action in the process chamber, wherein said action relates to the processing of semiconductor related devices (P. 9, L. 8-13,

L. 27-29); and transmitting an acknowledgement of the process related command from the first sensor to the computing system of the process module (P. 9, L. 7-8; FIG. 4).

Claim 6 is a dependent claim to dependent claim 5 and recites that the computer implemented method of claim 5 further comprises the steps of: initializing a second sensor, which is able to measure a second parameter in the process chamber (P. 4, L. 17-19; FIG.1; P. 7, L. 9-10; P. 4, L. 23-28; FIG. 4); transmitting a connect message from the second sensor to the computing system of the process module (P. 7, L. 16-20; FIG. 4); transmitting a command to get reportable specification from the computing system of the process module to the second sensor (P. 8, L. 14-15, L. 21-22); transmitting a reportable specification message from the second sensor to the computing system of the process module (P. 8, L. 15-19); initializing a third sensor, which is able to measure a third parameter in the process chamber (P. 4, L. 17-19; FIG.1; P. 7, L. 9-10; P. 4, L. 23-28; FIG. 4); transmitting a connect message from the third sensor to the computing system of the process module (P. 7, L. 16-20; FIG. 4); transmitting a command to get reportable specification from the computing system of the process module to the third sensor (P. 8, L. 14-15, L. 21-22); and transmitting a reportable specification message from the third sensor to the computing system of the process module (P. 8, L. 15-19).

Claim 7 is a dependent claim to dependent claim 6 and recites that the computer implemented method of claim 6 further comprises the steps of: spawning from the connection monitor task within the computing system of the process module a second sensor messaging task (P. 4, L. 17-19; FIG.1; P. 7, L. 20-22; FIG.

1); transmitting an acknowledgement of the command to get reportable specification from the second sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 15-17; FIG. 4); transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the second sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 19-21; FIG. 4); spawning from the connection monitor task within the computing system of the process module a third sensor messaging task (P. 4, L. 17-19; FIG.1; P. 7, L. 20-22; FIG. 1); transmitting an acknowledgement of the command to get reportable specification from the third sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 15-17; FIG. 4); and transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the third sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 19-21; FIG. 4).

Claim 8 is a dependent claim to dependent claim 7 and recites that the computer implemented method of claim 7 further comprises the steps of: transmitting command to get an alarm table command from the second sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 7, L. 25-26; FIG. 4); transmitting an acknowledgement of the command to get the alarm table from the computing system of the process module to the second sensor (P. 4, L. 17-19; FIG.1; P. 7, L. 26-28; FIG. 4); transmitting an alarm table from the computing system of the process module to the second sensor (P. 4, L. 17-19; FIG.1; P. 7, L. 29-31; P. 8, L. 1; FIG. 4); transmitting an acknowledgement of the alarm table from the second sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 2-3; FIG. 4); transmitting command to get an alarm table command

from the third sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 7, L. 25-26; FIG. 4); transmitting an acknowledgement of the command to get the alarm table from the computing system of the process module to the third sensor (P. 4, L. 17-19; FIG.1; P. 7, L. 26-28; FIG. 4); transmitting an alarm table from the computing system of the process module to the third sensor (P. 4, L. 17-19; FIG.1; P. 7, L. 29-31; P. 8, L. 1; FIG. 4); and transmitting an acknowledgement of the alarm table from the third sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 2-3; FIG. 4).

Claim 9 is a dependent claim to dependent claim 8 and recites that the computer implemented method of claim 8 further comprises the steps of: transmitting command to get time and initialization data from the second sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 4-5; FIG. 4); transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the second sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 5-8; FIG. 4); transmitting time and initialization data from the computing system of the process module to the second sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 8-10; FIG. 4); transmitting an acknowledgement of the time and initialization data from the second sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 11-13; FIG. 4); transmitting command to get time and initialization data from the third sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 4-5; FIG. 4); transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the third

sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 5-8; FIG. 4); transmitting time and initialization data from the computing system of the process module to the third sensor (P. 4, L. 17-19; FIG.1; P. 8, L. 8-10; FIG. 4); and transmitting an acknowledgement of the time and initialization data from the third sensor to the computing system of the process module (P. 4, L. 17-19; FIG.1; P. 8, L. 11-13; FIG. 4).

Claim 16 is a dependent claim to independent claim 1 and recites the computer implemented method of claim 1 wherein the reportable specification also provides possible range of data and frequency of data that will be provided from the sensor (P. 8, L. 22-24, L. 25-29).

Claim 17 is a dependent claim to dependent claim 16 and recites the computer implemented method of claim 16 wherein the reportable specification further provides whether the data needs to be requested from the sensor or will be automatically sent (P. 8, L. 24-29).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether or not claim 1 is unpatentable under 35 USC § 102(e) over Johnson et al. (US 6,553,336), hereinafter “Johnson”.

Whether or not claim 2 is unpatentable under 35 USC § 103(a) over Johnson, and in view of Kosugi et al. (US 6,204,768), hereinafter “Kosugi”.

Whether or not claim 3 is unpatentable under 35 USC § 103(a) over Johnson and Kosugi, and in view of Sandelman et al. (US 6,535,123), hereinafter “Sandelman” and Chari et al. (US 6,425,006), hereinafter “Chari”.

Whether or not claims 4-9 and 16 are unpatentable under 35 USC § 103(a) over Johnson, Kosugi, Sandelman, and Chari and in view of Halpern (US 5,301,122), hereinafter “Halpern”.

Whether or not claim 17 is unpatentable under 35 USC § 103(a) over Johnson, Kosugi, Sandelman, Chari, and Halpern and in view of Steen, III et al. (US 6,510,350), hereinafter “Steen”.

VII. ARGUMENT

Rejection under USC § 102

On pages 2-3 of the Final Office Action, the Examiner argues that claim 1 is rejected under 35 USC § 102(e) as being anticipated by Johnson.

A rejection under 35 USC § 102 requires that the cited reference teaches all the limitations of the claimed invention arranged as in the claim.

Applicants respectfully submit that Johnson does not teach all the limitations recited in claim 1. For example, claim 1 requires the limitation/step of transmitting a process related command related to the execution of an action in the process chamber from the computing system of the process module to the first sensor. As one of ordinary skill in the art pertaining to manufacturing semiconductor related devices (specified, e.g., in the Background of the Invention, P. 1, L. 16-18) can readily appreciate, the action in the process chamber may pertain to one or more of etching, deposition, polishing, etc. (e.g., P. 1, L. 19-22).

It is respectfully submitted that while it is known to transmit sensor data from the sensor to the computer (or transducer control module in the case of

Johnson), it is not known or obvious that the first sensor be sent a process related command related to the execution of an action in the process chamber from the computing system of the process module to the first sensor.

Generally speaking, the expectation is that data pertaining to process (such as pressure data for a pressure sensor or temperature for a temperature sensor) would be sent from the sensor the computer. Contrarily, the claimed invention specifies that process-related data related to the execution of an action in the process chamber (such as the start of a step or the stop of a step as disclosed on page 9 of the specification as filed) is transmitted from the computer to the sensor (i.e., opposite the direction expected for sensors).

It is respectfully submitted that this type of process-related data, which is sent from the computing system to the sensor, provides the sensor module with additional information with which the sensor can employ to gather and process its sensor data prior to sending the sensor data on to the computing system. This is a feature not known or disclosed in the art cited.

Johnson teaches that the transducer control module is a slave device and does not initiate communication with the transducers (col. 15, lines 14 – 18). Furthermore, Johnson teaches the monitoring system is typically a computer system implemented with software application to receives, stores, and analyzes event and status information from the transducer control module (col. 15, line54 – col. 16, line 40).

Johnson does not teach or disclose the claimed feature, in the manner claimed in amended claim 1, of transmitting a process related command that related

to the execution of an action in the process chamber from the computing system or the transducer control module of Johnson to the first sensor. For at least this reason, it is respectfully submitted that amended claim 1 is novel, nonobvious, and patentable over Johnson.

Johnson specifically teaches a transducer control module as being a slave device that does not initiate communications with the transducers (Col. 15, L. 16-18). Johnson further teaches that when a transducer reports the condition of an input, the control module transmits an acknowledge message that may include a request to update an output channel or return additional status information (Col. 15, L. 18-21). One of ordinary skill in the art will readily appreciate that a responsive acknowledgement is different from a command pertaining to an action in a process chamber.

Further, Johnson does not teach a control module or computing system that originates a command pertaining to an action in a process chamber. Even if a request is interpreted as a command, Johnson does not teach any of the updating an output channel and returning additional status as related to an action in a process chamber. Johnson does not even teach a process chamber.

Claim 1 of the application also includes the limitation/step of transmitting a command to get reportable specification from the computing system of the process module to the first sensor, wherein the computing system has no prior knowledge of a data type specification transmitted by the first sensor upon the transmitting the command to get the reportable specification. Claim 1 of the application further includes the limitation/step of automatically transmitting, upon receiving the

command to get the reportable specification, a reportable specification message from the first sensor to the computing system of the process module. As can be appreciated from the foregoing, claim 1 requires that the first sensor passively originates the reportable specification message in response to the command to get the reportable specification received from the computing system.

In contrast, Johnson teaches that a transducer actively searches for a transducer control module, identifies itself (the transducer) to a transducer control module, and provides corresponding TEDS (Transducer Electronic Data Sheet) information in order to be used in a network and be registered with that transducer control module (Col. 6, L. 45-50). Alternatively or additionally, Johnson teaches that a transducer transmits a registration request to a transducer control module and, if an acknowledge message from the transducer control module is received within a request packet/attempt limit, sends its TEDS information to the transducer control module (Col. 12, L. 29-39). Johnson does not teach that a transducer control module originates a command to get reportable specification. John does not teach that a transducer originates a reportable specification message upon receiving a command to get reportable specification from a transducer control module.

For the above reasons and others, Applicants respectfully submit that claim 1 is not anticipated by Johnson and is novel, non-obvious, and patentable over the cited arts of record.

Rejections under USC § 103

On page 4 of the Final Office Action, the Examiner argues that claim 2 is

unpatentable under 35 USC § 103(a) over Johnson, and in view of Kosugi.

On pages 5-6 of the Final Office Action, the Examiner argues that claim 3 is unpatentable under 35 USC § 103(a) over Johnson and Kosugi, and in view of Sandelman and Chari.

On pages 6-9 of the Final Office Action, the Examiner argues that claims 4-9 and 16 are unpatentable under 35 USC § 103(a) over Johnson, Kosugi, Sandelman, and Chari and in view of Halpern.

On page 9 of the Final Office Action, the Examiner argues that claim 17 is unpatentable under 35 USC § 103(a) over Johnson, Kosugi, Sandelman, Chari, and Halpern and in view of Steen.

A rejection under 35 USC § 103(a) requires that the combined references suggest the claimed combination. (MPEP 706 and 2141 et seq.). Under the Graham test, three factors must be evaluated: the scope and content of the prior art; the differences between the prior art and the claimed invention; and the level or ordinary skill in the art. (MPEP 706 and 2141 et seq.).

The Examiner argues that claims 2-9, 16, and 17 are rejected under 35 USC 103(a) for various reasons over various combinations of the cited arts of record. The Examiner argues that it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the various teachings of the cited arts to teach the various claimed combinations.

As can be appreciated from the foregoing discussions regarding the rejection under 35 USC § 102, there exist at least various deficiencies of Johnson in view of claim 1 of this application. It is respectfully submitted that the deficiencies of

Johnson are not cured by any of the other cited art (e.g., Kosugi, Sandelman, Chari, Halpern, and Steen), each taken alone or in combination with others. For at least the previously stated reasons, since independent claim 1 should now be allowable, dependent claims 2-9, 16, and 17, which incorporate independent claim 1 by reference, should also be allowable. Alternatively or additionally, dependent claims 2- 9, 16, and 17 are novel, nonobvious, and patentable due to their independent recitations of independently patentable features.

For the aforementioned reasons and others, it is respectfully submitted that the pending claims are novel, non-obvious, and patentable over the cited arts of record, taken alone or in combination.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner and/or members of the Board are invited to telephone Applicant's attorney Joseph A. Nguyen at (408) 257-5500 to facilitate this appeal.

At any time during the pendency of this application, please charge any additional fees or credit overpayment to the Deposit Account No. 502284.

Respectfully Submitted,
Huang et al.

CERTIFICATE UNDER 37 C.F.R. §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450, on this 15th day of April, 2007.

Huong Q.B. Nguyen

Name

/Huong Q.B. Nguyen/

Signature

By their Representatives:
IP STRATEGY GROUP, P.C.
Intellectual Property Law Office
P.O. Box 700640
San Jose, CA 95170-0640

/Joseph A. Nguyen/ Reg. No. 37,899
Atty: Joseph A. Nguyen
Reg. No.: 37,899
April 15, 2007

Date:

VIII. CLAIMS APPENDIX

1. (Previously Presented) A computer implemented method for communicating between a computing system of a process module, wherein the process module has a process chamber, and a first sensor, comprising the steps of:

- initializing the computing system of the process module;
- initializing the first sensor, which is able to measure a first parameter in the process chamber;
- transmitting a connect message from the first sensor to the computing system of the process module;
- transmitting a command to get reportable specification from the computing system of the process module to the first sensor, the computing system having no prior knowledge of a data type specification transmitted by the first sensor upon the transmitting the command to get the reportable specification;
- automatically transmitting, upon receiving the command to get the reportable specification, a reportable specification message from the first sensor to the computing system of the process module, the reportable specification message being configured to inform the computing system of the processing module at least the data type specification transmitted by the first sensor;
- transmitting a process related command related to the execution of an action in the process chamber from the computing system of the process module to the first sensor; and
- thereafter receiving, using the computing system of the processing module and the reportable specification message received from the first sensor, sensor data from the first sensor.

2. (Original) The computer implemented method, as recited in claim 1, further comprising the steps of:

spawning within the computing system of the process module a connection monitor task;

spawning from the connection monitor task within the computing system of the process module a first sensor messaging task;

transmitting an acknowledgement of the command to get reportable specification from the first sensor to the computing system of the process module; and

transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the first sensor.

3. (Previously Presented) The computer implemented method, as recited in claim 2, further comprising the steps of:

transmitting command to get an alarm table command from the first sensor to the computing system of the process module;

transmitting an acknowledgement of the command to get the alarm table from the computing system of the process module to the first sensor;

transmitting an alarm table from the computing system of the process module to the first sensor, wherein the alarm table designates the number of alarms, alarm identification numbers, and descriptions of the alarms; and

transmitting an acknowledgement of the alarm table from the first sensor to the computing system of the process module.

4. (Original) The computer implemented method, as recited in claim 3, further comprising the steps of:

transmitting command to get time and initialization data from the first sensor to the computing system of the process module;

transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the first sensor;

transmitting time and initialization data from the computing system of the process module to the first sensor; and

transmitting an acknowledgement of the time and initialization data from the first sensor to the computing system of the process module.

5. (Original) The computer implemented method, as recited in claim 4, further comprising the steps of:

transmitting a process related command related to the execution of an action in the process chamber from the computing system of the process module to the first sensor;

executing the action in the process chamber, wherein said action relates to the processing of semiconductor related devices; and

transmitting an acknowledgement of the process related command from the first sensor to the computing system of the process module.

6. (Original) The computer implemented method, as recited in claim 5, further comprising the steps of:

initializing a second sensor, which is able to measure a second parameter in the process chamber;

transmitting a connect message from the second sensor to the computing system of the process module;

transmitting a command to get reportable specification from the computing system of the process module to the second sensor;

transmitting a reportable specification message from the second sensor to the computing system of the process module;

initializing a third sensor, which is able to measure a third parameter in the process chamber;

transmitting a connect message from the third sensor to the computing system of the process module;

transmitting a command to get reportable specification from the computing system of the process module to the third sensor; and

transmitting a reportable specification message from the third sensor to the computing system of the process module.

7. (Original) The computer implemented method, as recited in claim 6, further comprising the steps of:

- spawning from the connection monitor task within the computing system of the process module a second sensor messaging task;

- transmitting an acknowledgement of the command to get reportable specification from the second sensor to the computing system of the process module;

- transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the second sensor;

- spawning from the connection monitor task within the computing system of the process module a third sensor messaging task;

- transmitting an acknowledgement of the command to get reportable specification from the third sensor to the computing system of the process module;
- and

- transmitting an acknowledgement of the reportable specification message from the computing system of the process module to the third sensor.

8. (Original) The computer implemented method, as recited in claim 7, further comprising the steps of:

- transmitting command to get an alarm table command from the second sensor to the computing system of the process module;

- transmitting an acknowledgement of the command to get the alarm table from the computing system of the process module to the second sensor;

- transmitting an alarm table from the computing system of the process module to the second sensor;

- transmitting an acknowledgement of the alarm table from the second sensor to the computing system of the process module;

- transmitting command to get an alarm table command from the third sensor to the computing system of the process module;

transmitting an acknowledgement of the command to get the alarm table from the computing system of the process module to the third sensor;

transmitting an alarm table from the computing system of the process module to the third sensor; and

transmitting an acknowledgement of the alarm table from the third sensor to the computing system of the process module.

9. (Original) The computer implemented method, as recited in claim 8, further comprising the steps of:

transmitting command to get time and initialization data from the second sensor to the computing system of the process module;

transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the second sensor;

transmitting time and initialization data from the computing system of the process module to the second sensor;

transmitting an acknowledgement of the time and initialization data from the second sensor to the computing system of the process module;

transmitting command to get time and initialization data from the third sensor to the computing system of the process module;

transmitting an acknowledgement of the command to get time and initialization data from the computing system of the process module to the third sensor;

transmitting time and initialization data from the computing system of the process module to the third sensor; and

transmitting an acknowledgement of the time and initialization data from the third sensor to the computing system of the process module.

10. (Withdrawn) An apparatus for processing semiconductor related devices, comprising:

a process chamber for processing semiconductor related devices;

a computing system for controlling the process chamber, electrically connected to the process chamber;
a network electrically connected to the computing system;
a first sensor electrically connected to the network;
a connection monitor task, which is spawn in the computing system after the computing system is initialized; and
a first sensor messaging task, which is spawn from the connection monitor task within the computing system of the process module after the first sensor initiates a connection with the computing system.

11. (Withdrawn) The apparatus, as recited in claim 10, further comprising:
a second sensor electrically connected to the network; and
a second sensor messaging task, which is spawn from the connection monitor task within the computing system of the process module after the second sensor initiates a connection with the computing system.

12. (Withdrawn) The apparatus, as recited in claim 11, further comprising:
a third sensor electrically connected to the network; and
a third sensor messaging task, which is spawn from the connection monitor task within the computing system of the process module after the third sensor initiates a connection with the computing system.

13. (Withdrawn) The apparatus, as recited in claim 12, wherein the first sensor, the second sensor, and the third sensor are connected as clients to the computing system of the process module.

14. (Withdrawn) The apparatus, as recited in claim 13, wherein the first sensor, the second sensor, and the third sensor are hot swappable plug and play.

15. (Withdrawn) The apparatus, as recited in claim 14, wherein said computing system, further comprises a heartbeat message tool which sends a

heartbeat message to a sensor if the computing system does not receive a message from the sensor within a period of time.

16. (Previously Presented) The computer implemented method, as recited in claim 1, wherein the reportable specification also provides possible range of data and frequency of data that will be provided from the sensor.

17. (Previously Presented) The computer implemented method, as recited in claim 16, wherein the reportable specification further provides whether the data needs to be requested from the sensor or will be automatically sent.

18. (Canceled)

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None